

Name _____ Period _____

Geometry Unit 6 Worksheet #2 - Proportions

For #1-15, solve each proportion for the variable.

1) $\frac{3}{5} = \frac{x}{75}$

2) $\frac{4}{5} = \frac{x}{15}$

3) $\frac{z+2}{4} = \frac{27}{12}$

4) $\frac{4x+3}{12} = \frac{5}{4}$

5) $\frac{3x-5}{4} = \frac{-13}{2}$

6) $\frac{b+1}{b-1} = \frac{5}{6}$

7) $\frac{3}{m+5} = \frac{2}{m+1}$

8) $\frac{2x+4}{3x-3} = \frac{13}{15}$

9) $\frac{2x+1}{18} = \frac{4x-3}{21}$

10) $\frac{(x-1)}{(x+1)} = \frac{10}{14}$

11) $\frac{x}{2x+1} = \frac{16}{40}$

12) $\frac{9}{10} = \frac{9x}{70}$

13) $\frac{2}{7} = \frac{b+1}{56}$

14) $\frac{x-2}{8} = \frac{3}{4}$

15) $\frac{y}{3} = \frac{y+6}{8}$

For #16-22, use proportions to solve each equation.

- 16) If 2 ounces cost \$0.30, how much will 5 ounces cost?
- 17) If 3.5 gallons cost \$5.18, how much will 2 gallons cost?
- 18) Mike & Laura traveled 756 miles in 10 hours. Their total trip is 1296 miles. How long will the total trip take?
- 19) Susan is having a 3 inch (length) by 5 inch (width) photograph enlarged so that the width is 16.5 inches. What is the length of the enlargement?
- 20) The ratio of country albums to jazz albums in a music collection is 2 : 3. If the music collection has 45 jazz albums, how many are country albums?
- 21) There are 237 junior girls at a high school. The ratio of girls to boys in the junior class is 3:4. How many juniors are boys?
- 22) The sides of a rectangle are in the ratio 2:5. The longer side of the rectangle is 70 cm. What is the length of the shorter side of the rectangle?